

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

ANGIOSCORE, INC.,

Plaintiff,

v.

TRI REME MEDICAL, INC., et al.,

Defendants.

Case No.: 12-CV-3393 YGR

**ORDER CONSTRUING CLAIMS IN DISPUTE;
GRANTING IN PART AND DENYING IN PART
DEFENDANTS' MOTION FOR SUMMARY
JUDGMENT OF NON-INFRINGEMENT**

INTRODUCTION

At the heart of this patent action is an angioplasty device named "Chocolate." Defendant Eitan Konstantino, an inventor of angioplasty devices, worked for plaintiff AngioScore, Inc. ("AngioScore"), a company that makes and sells angioplasty devices. Later, he started his own company, TriReme Medical, Inc., which has since reorganized as defendant TriReme Medical, LLC ("TriReme"). TriReme makes and sells the Chocolate device. AngioScore's operative Supplemental and Second Amended Complaint alleges that Chocolate infringes United States Patent No. 7,691,119, which AngioScore owns by assignment. (Dkt. No. 118 ¶¶ 14, 19; *id.*, Ex. A ("119 Patent").) AngioScore brings a single claim of patent infringement against TriReme, Konstantino, and two corporate entities associated with TriReme, namely, Quattro Vascular Pte Ltd. ("Quattro"), and QT Vascular Ltd. (f/k/a QT Vascular Pte. Ltd.) ("QTV").¹ Defendants answered, asserting counterclaims for (1) a declaration of noninfringement of the '119 Patent, (2) a declaration of

¹ AngioScore has sought leave to file a Third Amended Complaint that would add five additional claims arising from certain defendants' alleged business torts. (Dkt. No. 202.) The motion for leave to amend will be resolved in a separate order concurrently issued.

invalidity of the '119 Patent, (3) intentional and (4) negligent interference with prospective economic advantage (asserted by TriReme alone), (5) defamation, (6) false advertising under the Lanham Act, 15 U.S.C. section 1125, (7) unfair competition in violation of California's Business and Professions Code section 17200, and (8) unfair competition under the common law. (Dkt. No. 127.)

Now before the Court is a motion for summary judgment filed by TriReme and Konstantino (herein, "Defendants") seeking a declaratory judgment that Chocolate does not infringe the '119 Patent. (Dkt. No. 131 ("Motion").) The Motion presents two issues: (1) the proper construction of three disputed terms in the '119 Patent's only independent claim and (2) Chocolate's alleged infringement of the disputed terms once properly construed. The Motion is fully briefed, and the Court heard oral argument on February 14, 2014. (Dkt. Nos. 138-4 ("Opp'n"), 147 ("Reply"), 181 ("Tr.").)²

In Section I of this Order, the Court summarizes relevant facets of the prior art and the patent-in-suit. In Section II, the Court engages in claim construction as to the three disputed terms. The Court concludes that the terms have the following meanings:

Term	Construction
end	"part of the device where the stent, catheter shaft, and balloon connect"
longitudinal expansion	"reshaping by straightening"
attached	Ordinary and customary meaning

The Court then turns to the summary judgment analysis in Section III. The Court concludes that, with respect to the disputed terms, either triable issues of material fact exist or Defendants have failed to carry their burden of showing their entitlement to judgment as a matter of law. Defendants have established, however, their entitlement to summary judgment on three points: (a) the struts of

² The Court received briefing on claim construction prior to vacating the planned claim construction hearing. (Dkt. Nos. 94 ("Pl. CC Brief"), 100 ("Def's. CC Response"), 106 ("Pl. CC Reply"); *see also* Dkt. No. 114 (vacating claim construction hearing following technology tutorial).) The Court refers to those briefs where appropriate.

Chocolate do not literally infringe the '119 Patent's claim of struts that connect from "end" to "end" of the hypo tube; (b) AngioScore is barred from asserting the doctrine of equivalents to prove infringement of the "longitudinal expansion" limitation in claim 1 of the '119 Patent; and, similarly, (c) AngioScore is barred from asserting the doctrine of equivalents to prove infringement of the "attached" limitation. Accordingly, the Court **GRANTS IN PART AND DENIES IN PART** Defendants' Motion.

I. BACKGROUND

A. ANGIOPLASTY BASICS

The '119 Patent claims a balloon catheter with a non-deployable stent, which is a type of medical device used in angioplasty. Angioplasty is a term encompassing procedures for surgically repairing or clearing a blood vessel that has become occluded or blocked by plaque. This narrowing of the blood vessels is called stenosis; the blockages themselves are commonly called lesions.

One type of angioplasty procedure is percutaneous transluminal angioplasty ("PTA"). In that procedure, a surgeon inserts a catheter tube through the skin (i.e., percutaneously) and into a blood vessel (i.e., transluminally). When the vessel leads to the heart, the procedure is a percutaneous transluminal *coronary* angioplasty ("PTCA"). Both procedures begin the same way: the surgeon inserts a surgical sheath through the patient's skin and into a blood vessel, often at the top of the leg, in the femoral artery. The surgeon then inserts a guide wire through the sheath and threads it through the patient's body to the site of the lesion. The guide wire then acts as a "monorail track" which the surgeon may use to guide therapeutic devices into position in or near the lesion.

Different therapeutic devices have different effects. Most elementary and perhaps most familiar among these devices is the angioplasty balloon used in "POBA" procedures ("Plain Old Balloon Angioplasty"). Angioplasty balloons are generally long and thin, and, because they are formed around a central catheter used to conduct the fluid that inflates the balloon, often called "balloon catheters." The basic principle of the angioplasty balloon is that, while in its deflated state, the surgeon may position the balloon inside a blockage, and then inflate the balloon to repair the blockage. Inflation causes the balloon walls to compress the plaque against the vessel wall, thus widening the vessel.

POBA angioplasties may present certain risks, however. Four are relevant here. The first is the risk of the balloon moving during inflation. When the balloon inflates, irregularities in the shape of the plaque, or other factors, may cause the balloon to slip and, thus, miss the surgeon's intended target. Second, the balloon may deform during inflation as it encounters the uneven surface of the plaque. Resistance from the plaque can result in portions of the balloon inflating more than others and this deformation, in turn, can cause the overinflated portion of the balloon to exert too much pressure on the vessel wall. Such pressure can lead to trauma, including coronary artery dissection, a serious complication wherein the arterial wall cracks. A third, and similar, risk arises when the balloon is longer than the lesion; in such cases, the portion of the balloon outside the lesion may inflate more than the portion within the lesion, an effect called "dog-boning." That effect, too, results in high pressure on the vessel wall and increased risk of trauma. Finally, the fourth potential risk relevant here is the problem of restenosis. Even where the angioplasty procedure successfully widens the treated vessel, trauma caused by the procedure may lead to the development of scar tissue and eventual re-narrowing of the vessel.

To decrease these risks, inventors have developed various angioplasty devices addressing the limitations of POBA. To counteract the problems of slippage and uneven pressure, "cutting" and "gripping" balloons may be used. Such balloons have metallic elements like blades or wires affixed to the exterior of the balloon along its working length. The metal elements focus the balloon's pressure more predictably and also reduce the risk of slippage.

With respect to the problem of restenosis, doctors may couple a balloon with a "stent." A stent is a small tube, commonly constructed of wire mesh. An uninflated balloon is placed inside the stent, and then the surgeon positions both stent and balloon together within the lesion. When the balloon inflates, the stent expands and is lodged within the vessel wall as a bolster. In the case of "deployable" stents, when the balloon deflates, the stent remains expanded and is left behind in the body when the surgeon retracts the balloon.

By contrast, non-deployable stents also exist. Such stents are removed from the body after expansion in the vessel. They have the ability to contract as the balloon deflates so that the stent may be retrieved without damage to the vessel walls. One way of fabricating such a stent is to construct it

1 from a material having a shape memory, meaning that, when bent or otherwise reshaped, the material
2 returns to its prior shape. With memory material, when a balloon is deflated, the stent, instead of
3 remaining expanded, returns to its original shape, and may be removed along with the deflated
4 balloon.

5 The manner of stent manufacture is pertinent to the case at bar. Stents, non-deployable and
6 otherwise, may be manufactured by laser-cutting a "hypo tube." Generally speaking, a hypo tube is a
7 medical-grade metal tube. They exist in a variety of sizes. Such tubes may be turned into stents by
8 using a laser to cut out much of the metal, leaving behind only the mesh structure of the stent.

9 **B. THE '119 PATENT SPECIFICATION AND CLAIMS**

10 The '119 Patent discloses an angioplasty balloon catheter with a specialized, non-deployable
11 stent, denominated herein the "'119 Device."³ The patent describes the background art, and the
12 problem to be solved by the patent, in part as follows:

13 When a balloon used for percutaneous transluminal angioplasty (PTA)
14 or percutaneous transluminal coronary angioplasty (PTCA) is inflated and
15 forced into contact with the plaque, the balloon can have a tendency to move
or slip longitudinally in relation to the lesion or the vessel wall being treated.

16 Cutting balloons (atherotomy) have recently shown clinical efficacy in
17 preventing the reoccurrence of some types of restenosis As the cutting
18 balloon is inflated, [microsurgical blades] move radially and open the
occluded artery by incising and compressing the arterial plaque in a controlled
19 manner. An additional advantage of the cutting balloon is that it maintains its
position during inflation by using the metal blades on the external surface of
the balloon to penetrate into the tissue and prevent the balloon from moving.

20 Accordingly, it is the principal objective of the present invention to
21 provide a PTA or PTCA balloon that, like a cutting balloon, has a reduced
potential of slippage when inflated in a vessel.

22 ('119 Patent, col. 1:6-27.)

23 The patent specification describes a non-deployable stent that may be used in conjunction
24 with a conventional balloon catheter, the latter encompassing "inner and outer members comprising a
25 guide wire lumen and a balloon inflation lumen, respectively."⁴ ('119 Patent, col. 1:63-67.) The

26 ³ The Court uses this term as a convenient reference only. The record discloses that the '119
27 Patent has never been reduced to commercial application.

28 ⁴ In the present context, "lumen" refers to the hollow bore of a catheter. *See Merriam Webster*, <http://www.merriam-webster.com/medical/lumen> (last accessed June 10, 2014).

"proximal" end of the catheter—that is, the end closest to the surgeon, as opposed to the "distal" or farther end—"has a luer hub for connecting an inflation means."⁵ (*Id.*, col. 2:2-3.) The proximal and distal ends, or necks, of the balloon itself are cone-shaped when inflated. (*Id.*, col. 2:24-25.) The stent is "disposed," that is, placed, over the balloon catheter. (*Id.*, col. 2:26-41, 4:14-16.)

The patent specifies that the stent is made from a nickel-titanium alloy called Nitinol. ('119 Patent, col. 2:26-40.) Nitinol is a well-known memory material used in medical devices. (*Id.*, col. 2:48-49.) The patent specification describes a Nitinol structure comprised of a "laser cut hypo tube that expands upon inflation of the balloon, but collapses upon deflation of the balloon because of the super-elastic properties of the Nitinol material rather than remain expanded in the deployed condition, as would stents in general." (*Id.*, col. 2:36-40.) Specifically, the hypo tube is cut into a structure having three to twelve "struts . . . with a pattern of radial and longitudinal bends." (*Id.*, col. 2:43-45.) The struts are wires, the cross-sectional shape of which may be round, square, or triangular. (*Id.*; *id.*, col. 2:55-57.) The bends of the struts are "sinusoidal" in shape. (*Id.*, col. 2:50.)⁶ The sinusoidal bends in the struts are sized to accommodate "both radial and longitudinal expansion of the [stent] in response to longitudinal and radial expansion of the balloon during inflation, so that the [stent] maintains the balloon in its intended position during inflation." (*Id.*, col. 2:27-32; *see also id.*, col. 2:53-54.) The stent also may feature one or more U-shaped circumferential connectors which themselves accommodate balloon expansion. (*Id.*, col. 2:58-61, 3:35-49.)

Essentially, the '119 Patent describes a stent that expands as the balloon beneath it inflates and shrinks as the balloon beneath it deflates. The specification describes how the parts of the '119 Device fit together:

The distal end of the hypo tube is adhered to the distal neck of the balloon or the distal end of the catheter shaft, and the proximal end of the hypo tube is either attached to the proximal neck of the balloon or to the proximal end of the catheter shaft. The struts may be attached to the working region of the balloon to assist the hypo tube in staying with the balloon as it inflates and

⁵ A luer hub is standardized fitting used in medical devices to make a leak-free connection between one device's male part and a mating female part.

⁶ The parties' initial claim construction briefs sought construction of the term "sinusoidal." AngioScore's proposed construction was "generally S-shaped." Defendants' proposed construction was "a succession of waves or curves with a reversing direction." (Pl. CC Brief at 7.)

deflates, and an adhesive, such as a cyanoacrylate adhesive, may be used to tack the struts down onto balloon at various points.

('119 Patent, col. 2:61-3:3 (references to figures omitted).) The specification also contains mathematical formulas that specify that the "total length of the U-shaped connectors . . . must be greater than the circumference of the inflated balloon." (*Id.*, col. 3:11-13.)

The '119 Patent has nine claims. The latter eight all depend on the first. As a result, if Chocolate does not infringe claim 1, it does not infringe the '119 Patent. Claim 1 provides:

An angioplasty balloon catheter comprising:

a catheter shaft carrying an inflatable/deflatable balloon having a proximal end and a distal end; and

a non-deployable radially expansible stent comprising a hypo tube disposed over the balloon and comprising a proximal end; a distal end; and at least three longitudinally aligned, radially-spaced struts, wherein each strut extends from the proximal *end* to the distal *end* and prior to radial expansion has one or more bends that allow *longitudinal expansion* of the strut to accommodate radial expansion of the stent upon inflation of the balloon; wherein the distal end of the hypo tube is *attached* to the distal end of the catheter shaft and the proximal end of the tube is *attached* to the proximal end of the catheter shaft and the stent is made of a material having a memory so that the stent radially collapses and the struts longitudinally shorten upon deflation of the balloon.

('119 Patent, Claim 1 (disputed terms in bold italics).)

II. CLAIM CONSTRUCTION

A. LEGAL FRAMEWORK

Defendants' motion for summary judgment of non-infringement of claim 1 of the '119 Patent requires the Court to undertake "a two-step analysis: (1) claim construction to determine the scope and meaning of the claims asserted to be infringed, and then (2) a determination of whether the properly construed claims encompass the accused device." *Zelinski v. Brunswick Corp.*, 185 F.3d 1311, 1315 (Fed. Cir. 1999) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) *aff'd*, 517 U.S. 370 (1996)). Claim construction is a question of law for the Court rather than the finder of fact. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir. 1999). The Court turns now to that task.⁷

⁷ As the parties know, this Court "may engage in rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves." *Pfizer, Inc. v. Teva Pharm., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) (quoting *Jack*

Words in a patent claim generally are given the "ordinary and customary meaning" that they would have to a person of ordinary skill in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). "Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* at 1313. "[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.* at 1315 (internal quotation marks omitted). "[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Id.* at 1316 (citation omitted). "In addition to consulting the specification, we have held that a court should also consider the patent's prosecution history, if it is in evidence." *Id.* at 1317 (internal quotation marks omitted). "[B]ecause the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* Extrinsic evidence may also "be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319.⁸

The claim construction dispute now at bar focuses on three terms that Defendants selected to demonstrate Chocolate's non-infringement of the '119 Patent. All three terms reside in the '119 Patent's first claim. The Court addresses them in turn.

Guttman, Inc. v. Kopykake Enters., Inc., 302 F.3d 1352, 1361 (Fed. Cir. 2002)); *see also Pressure Products Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1315-16 (Fed. Cir. 2010) (affirming district court's revisiting of previous claim construction during trial).

⁸ The Court **DENIES** AngioScore's motion to strike the testimony and declarations of Defendants' purported expert witness, Dr. Amir Belson. (Dkt. No. 139.) Expert opinion is admissible, if at all, to aid the trier of fact. *See* Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993). Claim construction, however, is a question not of fact but of law. Thus, during claim construction, courts enjoy "complete discretion" in using expert opinion; they may opt to "adopt the expert legal opinion as [the court's] own, to find guidance from it, or to ignore it entirely, or even to exclude it." *Markman*, 52 F.3d at 983. Here, Belson's opinions are offered for purposes of claim construction only, and may serve as no more than an aid for the Court. The Court decides whether to rely on Belson's opinions, or any extrinsic evidence. While it lies within the Court's discretion to exclude Belson's opinions, the Court perceives no reason to do so.

B. TERMS**1. "End"**

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
a non-deployable radially expansible stent comprising a hypo tube disposed over the balloon and comprising a proximal end; a distal end; and at least three longitudinally aligned, radially-spaced struts, wherein each strut extends from the proximal <i>end</i> to the distal <i>end</i>	"extends from the end region of the stent nearest the surgeon to the end region of the stent farthest from the surgeon"	Ordinary and customary meaning
<u>The Court's Construction</u> "part of the device where the stent, catheter shaft, and balloon connect"		

Claim 1 of the '119 Patent claims struts that extend from one end of the stent to the other end. The parties' dispute centers on whether the claim encompasses an end *region* or simply an *end*. AngioScore urges the former construction, basing its position primarily on language in the patent specification that describes the distinctive bends of the patented device as residing on the ends of the struts. Defendants, for their part, have abandoned previous proposed constructions and now submit that the term "end" may be given its ordinary and customary meaning.

As set forth below, the Court, based on its review of the claim language and patent specification, declines to adopt either parties' position, both of which are unclear and manifestly litigation-driven. While taking pains to avoid imputing to the '119 Patent a level of specificity not present in the claims themselves, the Court concludes that, in the disputed passage in Claim 1, someone of ordinary skill in the art would understand "end" to mean that "part of the device where the stent, catheter shaft, and balloon connect."

a. Claim Language and Specification

The Court begins with the language of the claims. Claim 1 describes an "angioplasty balloon catheter" comprised of two fundamental elements: "a catheter shaft" and "a non-deployable radially expansible stent." ('119 Patent, col. 4:11, 4:12, 4:14.) Focusing first on the catheter shaft, the patent describes it only as "carrying an inflatable/deflatable balloon having a proximal end and a distal end." (*Id.*, col. 4:13.) Looking next to the stent, the patent recites that it is comprised of "a hypo

1 tube disposed over the balloon" and has "a proximal end, a distal end, and at least three . . . struts,
 2 wherein each strut extends from the proximal end to the distal end" (*Id.*, col. 4:14-19.) The
 3 paragraph also recites that "the distal end of the hypo tube is attached to the distal end of the catheter
 4 shaft and the proximal end of the tube is attached to the proximal end of the catheter shaft" The
 5 disputed language is found in the part of the claim describing the stent—specifically, describing that
 6 the stent has three struts which extend from one end of the stent to the other. Thus, the "end" at issue
 7 here is not necessarily *any* end mentioned in the patent; rather, it is the "end" of the stent.

8 Nevertheless, the Court looks to the rest of the language of the claims for indicia of the
 9 disputed term's meaning. The only claim to refer to an "end" other than claim 1 is claim 8. Though
 10 not at issue here, the Court examines claim 8 with a view to the principle that a word used in one
 11 claim may elucidate a different claim's use of the same word. *E.g.*, *Phillips*, 415 F.3d at 1314.

12 Claim 8 provides:

13 The angioplasty balloon of claim 1 wherein the struts of the stent are
 14 connected to each other intermediate the proximal end and distal end by
 15 connectors that include a bend which allows longitudinal expansion of the
 connectors to accommodate radial expansion of the balloon.

16 ('119 Patent, col. 4: 41-45.) Claim 8, then, holds that the U-shaped circumferential connectors of the
 17 specification (*see id.*, col. 2:58-61, 3:35-49) connect the struts somewhere between "the proximal end
 18 and distal end" of, apparently, the struts. Claim 8's reference to the proximal and distal ends of the
 19 struts sheds no additional light on where the end of the stent begins or, more pertinently, ends.

20 Reading the claim language in light of the purpose of the limitation set forth therein, *see*
 21 *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1368 (Fed. Cir. 2008), the most that can be
 22 said of the term "end" is that it refers to the portions of the '119 Device's two fundamental elements
 23 that join together. Claim 1 describes, first, a catheter shaft with two ends. It then describes a stent
 24 with two ends. Lastly, it discloses that the catheter shaft and the stent attach to each other at their
 25 corresponding ends. The claim language establishes that the end of the stent is the part that connects
 26 to the corresponding part of the catheter shaft, and vice-versa. Scrutiny of the claim language alone
 27 does not, however, establish a specific meaning for the term "end." The Court therefore proceeds to
 28 examining the patent specification.

The patent specification describes the stent as having "a proximal end **3**, a distal end **4**, and, *therebetween*, anywhere from 3-12 struts or wires **5** (depending on balloon size—but most likely 3-4 struts) with a pattern of radial and longitudinal bends." ('119 Patent, col. 2:41-45 (emphasis supplied).) Because this sentence locates the struts *between* the proximal end and distal end of the stent, it suggests a distinction between, on the one hand, the portion of the strut containing the device's distinctive sinusoidal bends and, on the other, the "ends" of the stent. This distinction, if accepted, would strongly contraindicate AngioScore's preferred construction, which conflates the "end" of the stent with the bends in the struts.

The next paragraph further undermines AngioScore's proposed construction. Its first sentence states: "As seen in FIGS. 1-4, each *end* of the linear, longitudinally aligned four struts **5** has a sinusoidal bend **6** that allows the laser cut hypo tube to expand longitudinally when the balloon **1** is inflated." ('119 Patent, col. 2:49-52 (emphasis supplied).) This language, on which AngioScore heavily relies, places the bends at the end of the *strut*, not, as AngioScore suggests, the end of the *stent*. AngioScore also points to the specification's use of the term "end" to refer to the necks at the proximal and distal ends of the balloon. (*Id.*, col. 2:24-25.) In both instances, AngioScore reads the specification's description of the ends of the *struts* or of the *balloon* to inform the meaning of "end" as used in Claim 1, where it describes the ends of the *stent*. (Opp'n at 14; Pl. CC Brief at 15; Pl. CC Reply Brief at 11.)⁹ The difficulty with AngioScore's position is that Claim 1 distinguishes between the component parts of the stent such that the end of a strut is not necessarily the end of the stent. Rather, the patent teaches that the struts are located *between*, and *connect*, the ends of the stent. The ends of the struts are distinct from the ends of the stent, of which the struts form a part. (*See* '119

⁹ AngioScore also proffers evidence purporting to show that, in patents not at issue here, defendant Konstantino and defense expert witness Belson used the term "end" to describe a region. (*See* Opp'n at 15.) This extrinsic evidence is inapposite, first, because neither Konstantino nor Belson are inventors of the '119 Patent (Stowell Decl., Ex. F), and hence their uses of the term "end" in other patents sheds no light on the proper construction of that term as used in the '119 Patent. Second, the word "end" may carry different meanings in different contexts, so its meaning in one patent does not necessarily explain its meaning in another. *See Cohesive Techs.*, 543 F.3d at 1368 ("The word 'about' does not have a universal meaning in patent claims, and its meaning depends on the technological facts of the particular case." (quoting *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1217 (Fed. Cir. 1995) (alterations omitted))).

Patent, col. 4:19-22 (contrasting the stent and strut in that the struts expand *longitudinally* to accommodate the stent's *radial* expansion).) The patent specification does not support equating the bends of the struts with the end of the stent. Since this is the bedrock upon which AngioScore's proposed construction rests, that construction founders.

The figures of the patent need not be relied on to reach this conclusion, but they support it. The Court recognizes that the figures merely represent possible embodiments of the patent and remains wary of inadvertently importing limitations from the figures into the patent claims themselves. *See Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed. Cir. 2008); *Playtex Products, Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 907-08 (Fed. Cir. 2005). That said, the figures consistently identify the proximal end and distal end of the stent as a cylindrical segment at the uttermost periphery of the device. The figure below, "a perspective view of an inflated angioplasty balloon incorporating a non-deployable stent according to the present invention" ('119 Patent, col. 1:31-33), labeled Figure 1 in the '119 Patent and Figure A here, is exemplary:

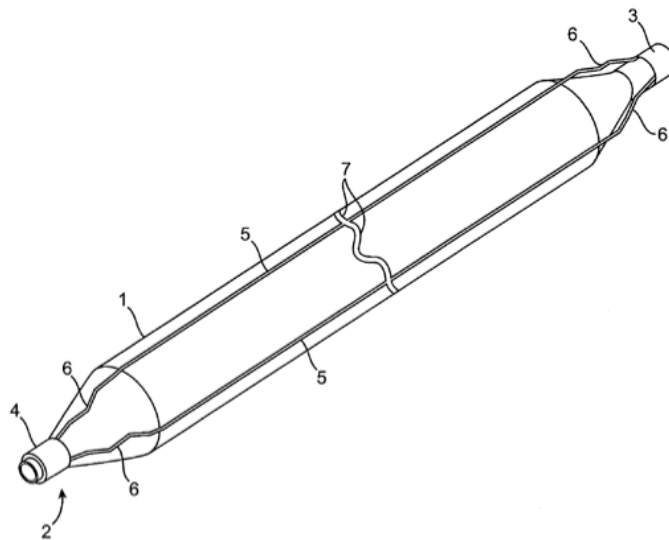


Figure A

In this figure, consistent with all the other embodiments, the stent has a proximal end designated 3, a distal end designated 4, and struts designated 5. (*E.g.*, '119 Patent, col. 2:41-43.) The balloon is designated 1 and the stent 2. (*E.g.*, *id.*, col. 2:11, 2:27.) The specification states that "each end of the linear, longitudinally aligned four struts 5 has a sinusoidal bend 6." (*Id.*, col. 2:50-51.)

The bend is in the struts (5), not in the stent (2), of which the struts are a part. The figures enhance the impression that claim 1's disputed instances of the term "end" refer to the ends of the hypo tube, where the struts terminate and the catheter shaft and the stent attach to each other. The "end" of the stent is therefore the part of the device where the stent, catheter shaft, and balloon connect.

The Court's construction, interpolated into the claim language, is consistent with the patent's claims, written description, and figures; matches the patent's level of specificity; and would permit the public (or, for that matter, a jury) to ascertain the meaning of "end" as used in the patent. The disputed part of claim 1 reads as follows when the Court's construction (set in bold italics) is interpolated:

An angioplasty balloon catheter comprising:

[. . .]

a non-deployable radially expansible stent comprising a hypo tube disposed over the balloon and comprising a proximal end; a distal end; and at least three longitudinally aligned, radially-spaced struts, wherein each strut extends from the proximal ***part of the device where the stent, catheter shaft, and balloon connect*** to the distal ***part of the device where the stent, catheter shaft, and balloon connect*** [. . .] .

b. The Parties' Arguments

The Court can embrace neither AngioScore's proposed construction of "end region" nor Defendants' proposal to give the term "end" its ordinary and customary meaning in the phrase "each strut extends from the proximal end to the distal end." As to AngioScore's proposed construction, the notion of an end "region" contains no limiting principle, that is, no way to determine where the "end region" ends and the rest of the device begins. As such, it is unacceptably vague. It also is out of step with the patent's own level of specificity, which distinguishes with reasonable care between the particular elements of the invention and sub-elements thereof.

As to Defendants' proposal to use the term's ordinary and customary meaning, that meaning, too, is unhelpfully vague and overbroad in light of the language of this patent. It bears noting that Defendants previously advanced a construction of the phrase "extends from the proximal end to the distal end" as "spans the entire length of the hypo tube." (Defs. CC Brief at 15; Defs. CC Reply at 10-11.) As AngioScore points out, Defendants adopted their current position only after their expert

conceded during his deposition that the struts do not, in fact, span the entire length of the hypo tube. (Opp'n at 15 (citing Dkt. No. 139-1 ("Hanle Decl."), Ex. 17, at 145:3-14).) The difficulty with Defendants' new suggestion to construe "end" with its ordinary and customary meaning is that doing so results in just as vague a meaning as AngioScore's proposed "end region" construction. Though semantically different, the terms are functionally equivalent. Thus, as was the case with "end region," the ordinary and customary meaning of "end" is unhelpful in defining with precision where any given end stops or starts. And, as was the case with AngioScore's proposed construction, the ordinary meaning of the term "end" is more general and imprecise than is the language of the '119 Patent itself. The patent uses "end" primarily to distinguish the proximal side of the invention from the distal side of the invention. The term "end" has little meaning if decoupled from the notions of proximal or distal. To the extent that "end" has independent significance in the disputed passage in claim 1, it is as the part of the device where the stent, catheter shaft, and balloon connect. That is the construction that the Court adopts.¹⁰

2. "Longitudinal Expansion"

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
each strut . . . has one or more bends that allow <i>longitudinal expansion</i> of the strut to accommodate radial expansion of the stent upon inflation of the balloon surface	"elongation of the strut that decreases the initial bend in the strut"	"a growth in length of the strut along the axis of the catheter"
<u>The Court's Construction</u> "reshaping by straightening"		

AngioScore contends that the term "longitudinal expansion" means "elongation of the strut that decreases the initial bend in the strut." Defendants contend that it means "a growth in length of the strut along the axis of the catheter." For the reasons set forth below, the Court construes the phrase "longitudinal expansion" to mean "reshaping by straightening."

¹⁰ Though the parties cite no prosecution history in connection with this term, the Court has reviewed the available prosecution history. The Court has located nothing that conflicts with the Court's construction of "end." On the contrary, the prosecution history reflects the inventor's reliance on the '119 Patent's attachment of the ends of the stent to the catheter shaft and balloon to overcome prior-art rejections. (See Dkt. No. 132 ("Stowell Decl."), Ex. N at 7, Ex. P at 2.)

a. *Claim Language and Specification*

In contrast to the word "end," which proliferates throughout the '119 Patent, the phrase "longitudinal expansion" appears only four times, twice in the claims themselves and twice in a portion of the patent specification. The Court first examines the claim language. The claims first use the term in claim 1, which recites that, in the stent, "each strut . . . has one or more bends that allow *longitudinal expansion* of the strut to accommodate radial expansion of the stent upon inflation of the balloon." ('119 Patent, col. 4:20-23 (emphasis supplied).) The second and only other instance of the term in the claims occurs in claim 8, which provides that "the struts of the stent are connected to each other intermediate the proximal end and distal end by connectors that include a bend which allows *longitudinal expansion* of the connectors to accommodate radial expansion of the balloon." (*Id.*, col. 4:42-46 (emphasis supplied).) In view of these claims, it is plain that the "expansion" of the struts of the '119 Device is a reshaping of the bends—not necessarily complete straightening thereof, but some degree of straightening. That is, straightening is the manner of reshaping.

The patent specification confirms this view. The specification first refers to longitudinal expansion in explaining that the bends in the struts exist to allow the stent to expand in response to balloon inflation:

In keeping with the invention, the balloon is provided with a Nitinol (NiTi) structure, generally designated 2, that incorporates bends for both radial and *longitudinal expansion* of the Nitinol structure 2 in response to *longitudinal* and radial *expansion* of the balloon during inflation, so that the Nitinol structure 2 maintains the balloon in its intended position during inflation.

('119 Patent, col. 2:26-32 (emphases supplied).) The Nitinol structure—which the patent later denominates the stent—has bends, and those bends, put simply, serve the function of unbending. The reshaping of the bends in turn allows the stent to stabilize the position of the balloon within a patient's blood vessel.

The second passage in the specification differs from the first in that it refers to longitudinal expansion of the balloon rather than the struts. It provides that "[t]he linear length of the sinusoidal bends 6 is sized to accommodate the *longitudinal expansion* of the balloon 1 due to inflation." ('119 Patent, col. 2:53-55 (emphasis supplied).) The necessity of sizing the bends to accommodate the expansion of the balloon and, thus, the stent, underscores that the function of the bends is to

1 straighten, which straightening achieves the limitation's purpose of accommodating balloon
2 expansion.

3 The Court's construction must give meaning to both words in the term "longitudinal
4 expansion." The Court turns to the latter term, "expansion," first. The claims, read in terms of the
5 specification, make plain that the "expansion" of the struts referred to in the patent is the
6 straightening of the struts' distinctive sinusoidal bends when the balloon inflates and applies force to
7 the interior of the struts. More specifically, the inflation of the working portion of the balloon
8 presses against the interior of the unbent medial or "working" segment of the struts; that outward
9 pressure moves the medial segment of the strut away from the bent ends of the strut, which, in
10 response, reshape into an at least somewhat straighter form. The word "expansion" in claim 1 refers
11 to reshaping of the strut by straightening.

12 The Court also addresses the word "longitudinal." Both sides acknowledge that, in the
13 nomenclature of the '119 Patent, the terms "longitudinal" and "radial" are opposed. The longitudinal
14 and radial dimensions are perpendicular to each other: the longitudinal direction aligns with the
15 longer side of a given element and the radial direction aligns with the shorter side. Defendants
16 contend that the descriptor "longitudinal" refers consistently throughout the patent to the direction
17 parallel to the axis of the catheter shaft, with the radial direction being perpendicular to that. Thus,
18 under Defendants' construction, when *any* element of the invention expands longitudinally, it
19 expands along the axis of the catheter shaft.

20 Defendants' position, however, contradicts claim 8. That claim uses "longitudinally" to refer
21 to the direction which, under Defendants' view, would be radial. Claim 8 describes the U-shaped
22 connectors that connect the struts together by encircling the stent crosswise, that is, perpendicular to
23 the long side of the stent. Claim 8 describes the bends in the U-shaped connectors as straightening
24 such that the connectors expand *longitudinally* to accommodate *radial* expansion of the stent.¹¹
25 Thus, claim 8 demonstrates that, in the '119 Patent, longitudinal and radial do not describe fixed
26 directions that apply to every element of the device, but rather directions that must be determined

27 ¹¹ Defendants averred at oral argument that the language of claim 8 was a mistake. (Tr. at
28 49:25-50:16.) As set forth herein, claim 8 is consistent with the rest of the patent. No evidence of
mistake appears before the Court.

with respect to a given element, with longitudinal and radial referring, respectively, to the longer and shorter dimensions the element. It so happens that most of the elements of the '119 Device are aligned parallel to the axis of the catheter shaft, and thus most of the references to longitude in the '119 Patent refer to the dimension parallel to the axis of the catheter shaft. But claim 8, which addresses the only element aligned perpendicular to the catheter shaft (the U-shaped connectors) uses longitudinal to refer to the long side of the connectors. The connectors are aligned perpendicular to the axis of the catheter shaft—that is, "radially," in Defendants' proposed construction. Claim 8 shows that Defendants' proposed construction cannot be correct. Claim 1's reference to "longitudinal expansion" of the struts means that the expansion occurs in the direction parallel to the longer side of the struts.

The Court's construction of "reshaping by straightening" encompasses this concept. Given that the struts consist of metal wires, "straightening" necessarily means that when they expand, they expand in a longitudinal direction. One skilled in the art would not mistake straightening of the wire-like struts for a "radial" expansion of the strut, that is, a broadening of the girth of the wire. Nor would lay jurors. The term "longitudinal expansion" means "reshaping by straightening."¹²

b. The Parties' Arguments

Both parties invoke the notion of lengthening in their proposed constructions, AngioScore by saying that the struts "elongat[e]" and Defendants by proposing that longitudinal expansion means a "growth in the length of the strut." The claim language, however, does not support the notion that the struts lengthen, elongate, or grow. Such language inaccurately suggests that the metal wires which comprise the struts somehow stretch, like a piece of putty being tugged from both ends. Not so. Nothing in the patent indicates that the struts *themselves* increase in length. On the contrary, claim 2 expressly provides that the stent and, hence, the struts, of the '119 Device are "made of an alloy of nickel and titanium." (*Id.*, col. 4:30-31.) Nothing in the patent suggests this metal wire somehow increases in length. Rather, when the working portion of the balloon expands and applies radial pressure to the interior of the struts, the curvature of the bends in the struts decreases. The

¹² As was the case with the previous term, the parties supplied no argument concerning the prosecution history's impact, if any, on the construction of the term "longitudinal expansion," and the Court's review of the prosecution history reveals nothing germane. (*See* Stowell Decl., Exs. O, P.)

effect is to permit the stent to increase in volume when pushed by the expanding surface of the balloon, and to do so without the struts' endpoints changing position in relation to the balloon. The struts of the '119 Device change shape, but are not claimed to *grow*. The parties' proposed claim constructions risk confusion. The "longitudinal expansion" referred to in the patent is a reshaping of the struts by straightening.

3. "Attached"

Term	AngioScore's Proposed Construction	Defendants' Proposed Construction
the distal end of the hypo tube is <i>attached</i> to the distal end of the catheter shaft and the proximal end of the tube is <i>attached</i> to the proximal end of the catheter shaft	"directly or indirectly attached"	"fixed directly to"
<u>The Court's Construction</u> Ordinary and customary meaning		

Claim 1 recites that, in the claimed stent, "the distal end of the hypo tube is **attached** to the distal end of the catheter shaft and the proximal end of the tube is **attached** to the proximal end of the catheter shaft" ('119 Patent, col. 4:23-26 (emphasis supplied).) The parties ground their proposed constructions of "attached" in the prosecution history. Defendants base their proposed construction ("fixed directly to") primarily on statements made during prosecution which, they say, triggered application of the doctrine of prosecution history estoppel. AngioScore responds that Defendants misreads the prosecution history and that neither it, the claim language, nor the specification requires direct, surface-to-surface attachment of the ends of the hypo tube to the ends of the catheter shaft. The Court ultimately concurs with AngioScore, though the Court declines to adopt AngioScore's proposed construction of "directly or indirectly attached." Rather, the Court relies on the plain meaning of the term "attached." Nothing before the Court suggests that the patent uses "attached" as a technical term of art requiring "elaborate interpretation." *See Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)

a. Claim Language and Specification

Claim 1 recites that "the distal end of the hypo tube is attached to the distal end of the catheter shaft and the proximal end of the tube is attached to the proximal end of the catheter shaft."

1 ('119 Patent, col. 4:22-25.) The claim is silent as to any distinction between direct versus indirect
2 attachment. Accordingly, the Court turns to the patent's specification, which provides, in pertinent
3 part:

4 The distal end 4 of the hypo tube is adhered to the distal neck of the
5 balloon or the distal end of the catheter shaft, and the proximal end 3 of the
6 hypo tube is either attached to the proximal neck of the balloon or to the
7 proximal end of the catheter shaft. The struts 5 may be attached to the
8 working region of the balloon 1 to assist the hypo tube in staying with the
9 balloon as it inflates and deflates, and an adhesive, such as a cyanoacrylate
adhesive, may be used to tack the struts down onto balloon at various points.

Catheter shafts to which the balloon and laser cut hypo tube are attached
can have diameters ranging from 2.5 F to 8 F, and the distal end may be
tapered and slightly less in diameter than the proximal end.

10 ('119 Patent, col. 2:61-3:7.)

11 AngioScore argues that, in view of the specification's statement that the ends of the hypo tube
12 may adhere or attach to the corresponding "neck of the balloon" *or* to the corresponding end of the
13 catheter shaft, "[a] person of skill in the art would understand that the ends of the hypo tube need not
14 be attached *directly* to the catheter shaft, and may be attached, for example, via the legs of the
15 balloon, the non-expanding portions of the balloon proximal and distal to the inflatable portion of the
16 balloon that are attached to the catheter shaft." (Opp'n at 21; *see also* Pl. CC Brief at 19 (same
17 principle).) Defendants counter that the claims and specification disclose only one method of
18 attachment—namely, adhesion—and that, because adhesion requires direct contact between two
19 surfaces, "the specification's use of adhesion as a form of attachment supports Defendants'
20 construction." (Defs. CC Response at 15.)

21 While Defendants are correct to say that the only method of attachment specified therein is
22 adhesion, the specification does not provide that attachment *must* occur via adhesion. The language
23 in the specification falls short of the sort of precision and specificity needed to impute a limitation
24 not present in the language of the claims themselves. The specification does not conclusively
25 establish that attachment must be direct.

26 *b. Prosecution History*

27 Alone among the three disputed terms, the parties argue from the prosecution history for the
28 term "attached." Defendants argue that the inventor of the '119 Patent, during prosecution,

1 disclaimed all but direct attachment in overcoming prior-art rejections based on U.S. Patent No.
2 6,053,913 ("Tu") in view of U.S. Patent No. 6,106,548 ("Roubin"). Defendants invoke the doctrine
3 of prosecution disclaimer to narrow the scope of the '119 Patent's claim that the ends of the hypo
4 tube are "attached" to the catheter shaft to only those attachments where the elements are "fixed
5 directly to" each other.

6 "The doctrine of prosecution disclaimer 'protects the public's reliance on definitive statements
7 made during prosecution' by 'precluding patentees from recapturing through claim interpretation
8 specific meanings [clearly and unmistakably] disclaimed during prosecution.'" *Computer Docking*
9 *Station*, 519 F.3d at 1374-75 (quoting *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323-24
10 (Fed. Cir. 2003)) (alteration in original). That is, it prevents claims from being construed "one way
11 in order to obtain their allowance and in a different way against accused infringers." *Id.* at 1375
12 (quoting *Chimie v. PPG Indus.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005)). Under the doctrine of
13 prosecution disclaimer, patentees limit the scope of a claim when they make "a clear and
14 unmistakable disavowal of scope during prosecution." *Id.* (quoting *Purdue Pharma L.P. v. Endo*
15 *Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006)). Such disavowal may occur where a patentee
16 "clearly characteriz[es] the invention in a way to try to overcome rejections based on prior art." *Id.*
17 However, "because the prosecution history represents an ongoing negotiation between the PTO and
18 the applicant, rather than the final product of that negotiation, it often lacks the clarity of the
19 specification" *Phillips*, 415 F.3d at 1317. This ambiguity cabins the application of the
20 prosecution disclaimer doctrine to "unambiguous disavowals" only. *See Grober v. Mako Products,*
21 *Inc.*, 686 F.3d 1335, 1341 (Fed. Cir. 2012), *reh'g denied* (Sept. 14, 2012). Alleged statements of
22 disavowal must be "both so clear as to show reasonable clarity and deliberateness . . . and so
23 unmistakable as to be unambiguous evidence of disclaimer." *Omega Eng'g*, 334 F.3d at 1325
24 (citations omitted).

25 Here, the patent examiner rejected an earlier iteration of the '119 Patent as obvious over Tu in
26 view of Roubin. (Stowell Decl., Ex. K at 2.) The examiner stated that Tu taught a "stent having
27 proximal and distal ends adapted to attach to a shaft of the balloon catheter" (*Id.*) In response,
28

1 the patentee distinguished Tu, which disclosed a stent that attached to the balloon at the proximal end
2 and, distally, either floated over the balloon or attached directly to its surface. The patentee argued:

3 In particular, it is now set forth that the stent has "proximal and distal ends
4 adapted to be attached to a shaft of the balloon catheter." Such attachment is
5 shown in the drawings, for example in Fig. 1, where proximal and distal ends
6 3 and 4 are adapted to be placed over the catheter shaft. *The teachings of Tu,*
in contrast, clearly show that the stent either floats or is somehow attached to
the balloon and is not attached on to the catheter shaft, particularly
terminating well before the distal of the balloon.

7 As the purpose of the present invention, in contrast to that of Tu et al., is to
8 provide a scoring/gripping structure which can be placed over a variety of
9 balloon catheters, which structure is not intended to be attached to the surface
10 of the balloon, *it is important to have the means for attaching the structure to*
the catheter shaft. In contrast, Tu et al. describes an electrode structure which
is intended to be somehow formed or conformed over the balloon and which is
not taught or suggested ever to be attached directly to the catheter shaft,
particularly at the distal end.

11 (*Id.*, Ex. J at 6 (emphases supplied).)

12 In later correspondence, the patentee argued:

13 The Examiner will appreciate that having the *direct attachment* to the catheter
14 shaft on the proximal and distal sides of the balloons will help assure the
15 proper alignment of the stent over the balloon as the balloon is expanded and
collapsed.

16 (*Id.*, Ex. L at 5 (emphasis supplied).)

17 Defendants argue that, by these statements, the inventor disclaimed any attachment between
18 the stent and the catheter shaft except for direct, surface-to-surface attachment. (*See* Defs. CC
19 Response at 15; Motion at 18-20; Reply at 11-14.) The Court is not persuaded. The statements
20 made by the patentee do not rise to the level of a clear and unmistakable disavowal of indirect
21 attachment. Rather, the statements contrast the invention of the '119 Patent with Tu, in that the
22 former requires attachment of both ends of the balloon to the catheter shaft, while the latter requires
23 attachment at only one end. The patentee's use of the word "direct" does not clearly or unmistakably
24 disavow all forms of attachment other than surface-to-surface attachment; rather, the patentee
25 disavowed attachments occurring somewhere other than on the ends of the balloon. At most, the
26 patent history is ambiguous on this point. It does not support application of prosecution history
27 estoppel. Thus, AngioScore is entitled to the full breadth of the claim term "attached."

That said, the Court declines to adopt AngioScore's proposed construction of "directly or indirectly attached." Rather, the Court gives the term "attached" its ordinary and customary meaning. The Court perceives the plain and ordinary meaning of "attached" to be more harmonious with the patent, and somewhat narrower, than AngioScore's proposed construction. AngioScore's proposal expressly contemplates indirect attachment, and, in doing so, invites arguments as to how attenuated or "indirect" an attachment may become before it no longer "attaches." In contrast, the plain and ordinary meaning, by refraining from emphasizing the notion of indirectness, more accurately captures the term's emphasis on connection and junction. *E.g., Merriam-Webster Dictionary*, <http://www.merriam-webster.com/dictionary/attached> (last accessed June 22, 2014).

For the reasons set forth above, the Court gives "attached," as used in claim 1, its plain and ordinary meaning.

C. THE COURT'S CONSTRUCTIONS

Term	Construction
end	"part of the device where the stent, catheter shaft, and balloon connect"
longitudinal expansion	"reshaping by straightening"
attached	Ordinary and customary meaning

III. SUMMARY JUDGMENT

Having construed the claims, the Court proceeds to the second step of the infringement analysis, namely, determining "whether the properly construed claims read on the accused device." *Pitney Bowes*, 182 F.3d at 1304.

A. LEGAL FRAMEWORK

1. Summary Judgment Principles

Summary judgment is appropriate if, viewing the evidence and drawing all reasonable inferences in the light most favorable to the nonmoving party, there are no genuine disputed issues of material fact, and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). At the summary judgment stage, the Court "does

not assess credibility or weigh the evidence, but simply determines whether there is a genuine factual issue for trial." *House v. Bell*, 547 U.S. 518, 559-60 (2006). A fact is "material" if it "might affect the outcome of the suit under the governing law," and a dispute as to a material fact is "genuine" if there is sufficient evidence for a reasonable trier of fact to decide in favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Mere conclusory, speculative testimony in affidavits and moving papers is insufficient to raise genuine issues of fact and defeat summary judgment. *See Thornhill Publ'g Co. v. GTE Corp.*, 594 F.2d 730, 738 (9th Cir. 1979).

The moving party bears the initial burden of identifying those portions of the pleadings, discovery, and affidavits that demonstrate the absence of a genuine issue of material fact. *Celotex*, 477 U.S. at 323. Where the moving party will have the burden of proof on an issue at trial, it must affirmatively demonstrate that no reasonable trier of fact could find other than for the moving party, but on an issue for which the opposing party will have the burden of proof at trial, the party moving for summary judgment need only point out "that there is an absence of evidence to support the nonmoving party's case." *Id.* at 325; *accord Soremekun v. Thrifty Payless, Inc.*, 509 F.3d 978, 984 (9th Cir. 2007). Once the moving party meets its initial burden, the nonmoving party must set forth, by affidavit or as otherwise provided in Rule 56, "specific facts showing that there is a genuine issue for trial." *Liberty Lobby*, 477 U.S. at 250 (internal quotation marks omitted). If the nonmoving party's "evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Id.* at 249-50 (internal citations omitted).

2. Patent Infringement Principles

While claim construction is a question of law, infringement is a question of fact. *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1357 (Fed. Cir. 2005). "Thus, summary judgment of non-infringement can only be granted if, after viewing the alleged facts in the light most favorable to the non-movant, there is no genuine issue whether the accused device is encompassed by the claims." *Pitney Bowes*, 182 F.3d at 1304.

"There are two types of infringement: literal infringement . . . and infringement under the doctrine of equivalents." *Pozen Inc. v. Par Pharm., Inc.*, 696 F.3d 1151, 1167 (Fed. Cir. 2012). "To establish literal infringement, every limitation set forth in a claim must be found in an accused

product, exactly." *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995). "To find infringement under the doctrine of equivalents, any differences between the claimed invention and the accused product must be insubstantial." *Brilliant Instruments, Inc. v. GuideTech, LLC*, 707 F.3d 1342, 1346-47 (Fed. Cir. 2013) (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608 (1950)). "One way of proving infringement under the doctrine of equivalents is to show, for each claim limitation, that the accused product 'performs substantially the same function in substantially the same way with substantially the same result as each claim limitation of the patented product.'" *Id.* at 1347 (quoting *Crown Packaging Tech., Inc. v. Rexam Beverage Can Co.*, 559 F.3d 1308, 1312 (Fed. Cir. 2009)).

Broad application of the doctrine of equivalents is limited, however, by prosecution history estoppel. *Conoco, Inc. v. Energy & Envtl. Int'l, L.C.*, 460 F.3d 1349, 1363 (Fed. Cir. 2006). It does so "by barring an equivalents argument for subject matter relinquished when a patent claim is narrowed during prosecution." *Id.* (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733-34 (2002)). The Federal Circuit has recognized two types of prosecution history estoppel: (1) amendment-based estoppel, which occurs when the patentee makes "a narrowing amendment to the claim," and (2) argument-based estoppel, which occurs when the patentee "surrender[s] claim scope through argument to the patent examiner." *Id.* (citing *Deering Precision Instruments, LLC v. Vector Distrib. Sys., Inc.*, 347 F.3d 1314, 1324 (Fed. Cir. 2003)).

As to amendment-based estoppel, "[w]hen a patentee makes a narrowing amendment to a claim, the patent holder has the burden to demonstrate that the reason for the amendment was unrelated to patentability (e.g., to avoid prior art)." *Id.* (citing *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 33 (1997)). "When the record lacks explanation for the amendment, [courts] presume that the PTO had a substantial reason related to patentability for including the limiting element added by amendment." *Id.* (internal quotation marks omitted). The presumption is rebuttable. *See id.* at 1363-64.

As to argument-based estoppel, the party invoking that doctrine must show "a clear and unmistakable surrender of subject matter." *Id.* at 1364 (quoting *Deering Precision Instruments*, 347 F.3d at 1326). Unlike with amendment-based estoppel, no presumption of surrender applies. *Id.*

"The relevant inquiry is whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter." *Id.* (quoting *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448, 1457 (Fed. Cir. 1998) (en banc)). Whether amendment-based or argument-based estoppel is invoked, "[p]rosecution history estoppel is a legal question" *Cybor Corp.*, 138 F.3d at 1460.

B. APPLICATION TO PATENT-IN-SUIT

Both parties have grounded their summary judgment arguments in their preferred claim constructions, which the Court has declined to adopt. Nevertheless, the Court has reviewed the evidence to determine whether it entitles Defendants to a summary judgment of non-infringement such that it would dispose of all disputed limitations. As set forth below, the Court concludes that it does not. However, Defendants do establish the following: one, there is no literal infringement of the challenged limitation that "each strut extends from the proximal end to the distal end," and, two, AngioScore may not rely on the doctrine of equivalents to prove infringement of the disputed terms "longitudinal expansion" or "attached."

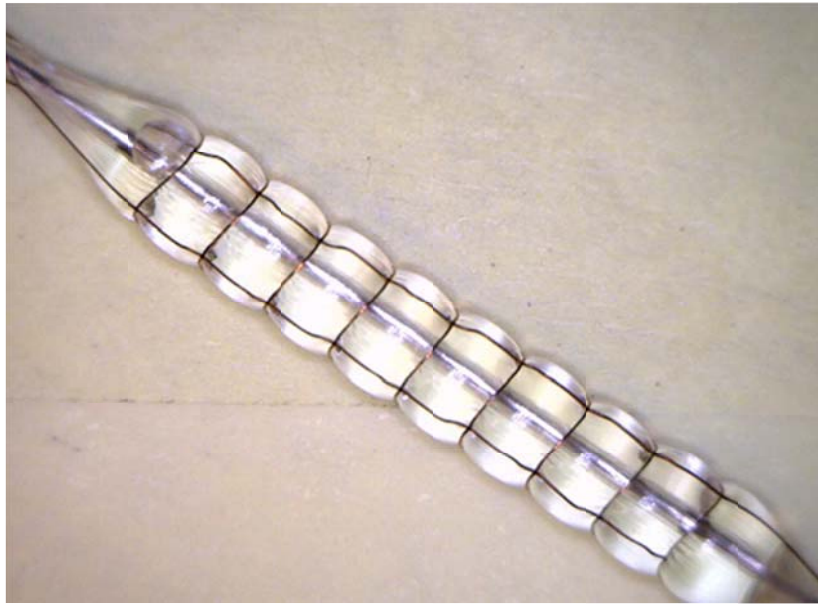
1. "Each Strut Extends from the Proximal End to the Distal End"

Both the invention of the '119 Patent and the accused Chocolate device have struts that extend along the longitudinal side of the balloon. (*Compare* '119 Patent, claim 1 (Figure A above) *with* Dkt. No. 133-3 ("Konstantino Decl."), Ex. A (image of Chocolate device; Figure B below), Ex. B (engineering schematic of Chocolate device (under seal), Ex. C (same (under seal))).¹³ Similar to

¹³ Pursuant to Civil Local Rule 79-5(b), the Court **GRANTS** Defendants' motion to seal exhibits B and C of the Konstantino Declaration, which consist of trade-secret engineering schematics of the Chocolate device. (Dkt. No. 133.)

The Court **DENIES WITHOUT PREJUDICE** AngioScore's motion to seal various other exhibits. (Dkt. No. 138.) The declaration submitted by Defendants, as the designating party, in support of the motion to seal does not specify which portions of the exhibits are sealable, and instead asks to have them sealed in their entirety. *See* Civ. L.R. 79-5(b) ("The request must be narrowly tailored to seek sealing only of sealable material . . ."). Moreover, the declaration fails to articulate compelling reasons that would override the public's right of access, and instead offers bare allegations of harm. That does not suffice. *See In re Midland Nat. Life Ins. Co. Annuity Sales Practices Litig.*, 686 F.3d 1115, 1119 (9th Cir. 2012); *see also Dugan v. Lloyds TSB Bank, PLC*, 12-CV-02549-WHA NJV, 2013 WL 1435223, at *2 (N.D. Cal. Apr. 9, 2013) (requiring "particularized showing" rather than "[b]road allegations of harm, unsubstantiated by specific examples or articulated reasoning," to satisfy even the standard applicable to nondispositive motions). The motion is therefore denied without prejudice to filing of amended submissions, consistent with the Court's concurrently issued Order Denying without Prejudice Motions to Seal.

the '119 Device, the Chocolate device consists, in relevant part, of a metal, wire-like structure disposed over an angioplasty balloon catheter. The metal structure of Chocolate is called a "constraining structure," so dubbed because its function is to constrain the balloon upon expansion such that the balloon bulges out past the limits of the metal structure to form "pillows"; these pillows, in turn, are the portion of the device that compresses plaque. The purported purpose of the pillows, and goal of the Chocolate device, is to diffuse pressure over a wider surface area and thus reduce vessel trauma. (Konstantino Decl. ¶¶ 4-7, 14.)



a. Literal Infringement

AngioScore argues that, under its proposed construction of "end" as "end region" and under the plain meaning of the claim language, the Chocolate device literally infringes the '119 Patent because the struts of Chocolate extend from end *region* to end *region*. (Opp'n at 16.) However, AngioScore acknowledges that, as seen in Figure B, the struts of the Chocolate device do not extend from the extreme endpoint of one side to the extreme endpoint of the other side. Rather, Chocolate's struts extend from the extreme endpoint of one side to the "end region" of the other side. (Dkt. No. 140-2 at 1; *see also* Konstantino Decl., Exs. B & C.)

Defendants contend that Chocolate does not literally infringe because the struts of Chocolate do not each extend the entire length of the constraining structure. (Motion at 11-12; Reply at 2-3.)

Though the Court has not adopted Defendants' suggestion to construe the term "end" according to its ordinary and customary meaning for one skilled in the art, the Court concludes that Defendants are ultimately correct that Chocolate does not literally infringe. As AngioScore admits (Opp'n at 16), the struts of the Chocolate device do not include the "end segments" that would allow them to extend from the end of the device to the other, assuming that Chocolate has ends in the sense that the '119 Patent does, i.e., a part where the device's stent, catheter shaft, and balloon connect.¹⁴ Further, as AngioScore and its expert acknowledge, the portion "missing" from Chocolate's struts is the portion containing the '119 Patent's distinctive sinusoidal bend. (*Id.* at 16; Dkt. No. 138-6 ("Horzewski Decl.") ¶¶ 18-20).) Thus, the struts of the Chocolate device do not satisfy claim 1's limitation that "each strut extends from the proximal end to the distal end."

Defendants' Motion is **GRANTED** to the limited extent that it seeks summary judgment that Chocolate does not literally infringe the '119 Patent's limitation of struts that extend from each "end" of the stent.

b. Availability of Doctrine of Equivalents

AngioScore contends that Chocolate infringes the '119 Patent by the doctrine of equivalents. Defendants' sole response is that AngioScore should be barred from asserting equivalence at all, for two reasons: (1) AngioScore's alleged failure to provide "particularized testimony and linking argument" in the Disclosure of Asserted Claims and Infringement Contentions (Stowell Decl., Ex. G ("Disclosure")) filed pursuant to this District's Patent Local Rules 3-1 and 3-2, and (2) prosecution history estoppel. As set forth below, the Court rejects both of Defendants' arguments and, accordingly, concludes that Defendants fail to carry their burden of showing their entitlement to a summary judgment of non-infringement.¹⁵

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¹⁴ The Court assumes without deciding that Chocolate has "ends" in the sense that the '119 Device does. If Chocolate does not, then it would not infringe. *See, e.g., Cephalon, Inc. v. Watson Pharm., Inc.*, 707 F.3d 1330, 1340 (Fed. Cir. 2013) ("To prove infringement, the patentee must show that an accused product embodies *all* limitations of the claim" (emphasis supplied)).

¹⁵ This conclusion does not carry with it any judgment, implicit or otherwise, as to whether AngioScore demonstrates infringement under the doctrine of equivalents. That question is not before the Court, as AngioScore did not file a cross-motion for summary judgment of infringement.

i. Compliance with Patent Local Rules

Defendants contend that, to rely on the doctrine of equivalents, AngioScore was obligated to supply "particularized testimony and linking argument" in its Disclosure. (Motion at 13.) However, the cases from which Defendants draw this principle do not speak to the showing required in an initial disclosure of infringement contentions. Rather, they stand for the proposition that parties asserting infringement must present particularized testimony and linking argument to carry their ultimate *evidentiary* burden at trial or on summary judgment. *See Cephalon*, 707 F.3d at 1340 (affirming district court's finding of noninfringement following a bench trial); *Am. Calcar, Inc. v. Am. Honda Motor Co., Inc.*, 651 F.3d 1318, 1338-39 (Fed. Cir. 2011) (requirement of particularized testimony and linking argument "applies in the summary judgment context"); *Lear Siegler, Inc. v. Sealy Mattress Co. of Michigan, Inc.*, 873 F.2d 1422, 1426 (Fed. Cir. 1989) (finding that "the jury in this case was not . . . guided" by particularized testimony and linking argument); *see also Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1566-67 (Fed. Cir. 1996) (explaining how requirement of particularized testimony and linking argument both aids and constrains "the fact-finder"). The principle identified by Defendants does not apply to AngioScore's Disclosure, and thus reliance on it is misplaced.

The standard applicable to AngioScore's Disclosure is rooted in the Court's Patent Local Rules. Patent Local Rule 3-1(e) requires infringement plaintiffs to state in their initial disclosures "[w]hether each limitation of each asserted claim is alleged to be literally present or present under the doctrine of equivalents in the Accused Instrumentality." Patent L.R. 3-1(e). A general principle emerges from the cases applying this rule: an infringement plaintiff does not satisfy its Rule 3-1(e) disclosure obligations merely by stating in conclusory fashion that the doctrine of equivalents applies to a particular limitation. *E.g., CSR Tech. Inc. v. Freescale Semiconductor*, C-12-02619 RS JSC, 2013 WL 503077, at *8 (N.D. Cal. Feb. 8, 2013) (a "boilerplate recitation is insufficient under Rule 3-1(e)"); *Implicit Networks Inc. v. Hewlett-Packard Co.*, C 10-03746 SI, 2011 WL 3954809, at *3 (N.D. Cal. Sept. 7, 2011) (plaintiff "cannot simply recite the doctrine of equivalents . . . without providing specific analysis, on an element-by-element basis, as to its theory of why there is infringement under the doctrine of equivalents"); *Rambus Inc. v. Hynix Semiconductor Inc.*, C-05-

00334 RMW, 2008 WL 5411564 (N.D. Cal. Dec. 29, 2008) ("The Patent Local Rules require a limitation-by-limitation analysis, not a boilerplate reservation."). Rather, the infringement contention must "provide reasonable notice to the defendant *why* the plaintiff believes it has a reasonable chance of proving infringement." *Shared Memory Graphics LLC v. Apple, Inc.*, 812 F. Supp. 2d 1022, 1025 (N.D. Cal. 2010) (emphasis supplied). The Rule "does not necessarily require the patent holder to produce evidence of infringement, but it must map specific elements of Defendants' alleged infringing products onto the Plaintiff's claim construction." *Id.* Notably missing from these cases is any discussion of a need to show that failure to disclose has resulted in prejudice. The reason why seems apparent: one purpose of the Rule is "to require the party claiming infringement 'to crystallize its theories of the case early in the litigation and to adhere to those theories once disclosed.'" *Id.* at 1024 (quoting *Bender v. Advanced Micro Devices, Inc.*, C-09-1149 MMC(EMC), 2010 WL 363341, at *1 (N.D. Cal. Feb. 1, 2010)) (emphasis supplied). Doing so, it is believed, helps to "hasten resolution on the merits." *Id.* (quoting *FusionArc, Inc. v. Solidus Networks, Inc.*, C 06-06760RMW(RS), 2007 WL 1052900 (N.D. Cal. Apr. 5, 2007)).

Here, AngioScore's Disclosure included its contention that the struts of Chocolate infringe the '119 Patent's claim of "at least three longitudinally aligned, radially-spaced struts, wherein each strut extends from the proximal end to the distal end." (Stowell Decl., Ex. G, at 6.) With respect to that claim, AngioScore's Disclosure first described element by element the manner in which AngioScore contends that Chocolate literally infringes. (*Id.*) It then recited:

Each limitation is literally present in the Chocolate Balloon Catheter. However, to the extent Defendants allege that certain claim elements are not present, AngioScore contends that any "missing" claim element is also met by the Chocolate Balloon Catheter under the doctrine of equivalents. In particular, Defendants' argument that the struts extend to only one end of the hypo tube, but not both, because a small portion of the strut has been removed, is an insubstantial difference.

(*Id.*)

AngioScore's Disclosure expressly articulates its theory of equivalence. The theory happens, in this instance, to be a simple one: that while "a small portion of the strut has been removed," such removal is inconsequential. Given the simplicity of the theory at hand, AngioScore's statement satisfies the disclosure requirement imposed by Patent Local Rule 3-1(e), albeit minimally. (*See*

infra Section III.B.3.b (holding that different disclosure does not satisfy Rule 3-1.) Defendants knew, or should have known, upon reading this part of the Disclosure why AngioScore thinks it can demonstrate infringement of the '119 Patent by Chocolate with respect to the claimed struts. Accordingly, AngioScore's statements in the Disclosure present no bar to AngioScore's reliance on the doctrine of equivalents to prove infringement of the "end" limitation of claim 1.

ii. Prosecution History Estoppel

Defendants next argue that AngioScore may not assert the doctrine of equivalents because of a narrowing amendment during prosecution. Specifically, Defendants contends that in order to avoid prior art the patentee of the '119 Patent introduced a "specific structural limitation" that the strut was required to "extend[] from," rather than "connect[]," the proximal end to the distal end of the stent. (Stowell Decl., Ex. N, at 3.) Generally speaking, an amendment made during patent prosecution estops the patentee from recapturing any subject matter disavowed by the amendment. It follows that, for estoppel to arise, there must be some appreciable disavowal of subject matter. *See Festo Corp.*, 535 U.S. at 736-37 (distinguishing between "narrowing amendments," which give rise to estoppel, and merely "cosmetic" amendments, which do not). Thus, "[a] narrowing amendment may occur when a preexisting claim limitation is narrowed by amendment or when a new claim limitation is added by amendment." *Medtronic Navigation, Inc. v. Brainlab Medizinische Computersysteme GmbH*, 417 F. Supp. 2d 1188, 1195 (D. Colo. 2006) *aff'd sub nom. Medtronic Navigation, Inc. v. BrainLab Medizinische Computersysteme GmbH*, 222 F. App'x 952 (Fed. Cir. 2007) (citing *Honeywell Int'l v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1141 (Fed. Cir. 2004) (en banc)).

Here, during prosecution of the '119 Patent and following a prior-art rejection over Tu, the patentee amended the claim that would eventually become claim 1 of the '119 Patent. The claim was amended in a variety of ways, including by replacing the word "connecting" with the words "extends from" (set in boldface below). The amendments are set forth below with additions underlined and deletions struck through:

An angioplasty balloon catheter comprising: [. . .]

a non-deployable stent comprising a hypo tube disposed over ~~adapted to be secured to the balloon and comprising a proximal end; a distal end; at least three linear,~~ longitudinally aligned, radially-spaced struts, wherein each

strut extends from connecting the proximal end to the distal end and has,
~~each strut having one or more bends that allow expansion of the strut to~~
~~accommodate the inflation of the balloon; wherein the distal end of the~~
~~hypo tube is attached to the distal end of and the stent having proximal and~~
~~distal ends comprising rings which are adapted to attach to the catheter~~
~~shaft and the proximal end of the tube is attached to the proximal end of~~
~~the catheter shaft at the proximal and distal ends of the balloon on the~~
~~balloon catheter and the stent is being made of a material having a memory~~
~~so that the stent collapses upon deflation of the balloon.~~

(Stowell Decl., Ex. N, at 3.)

Defendants argue that the replacement of "connecting" with "extends from" introduced a "specific structural limitation" that "narrowed the claim." (Motion at 13.) The Court disagrees. First, the amendment did not introduce a structural limitation, for the claim already contained one, namely, that the struts extended from one end of the stent to the other. Second, the concept of "extends from" is not appreciably narrower than the concept of "connecting." Defendants argue in their Reply brief that "if the amendment was necessary to avoid the Tu patent" then the amendment must have been meaningful (Reply at 4), but they articulate no reason why the amendment would have been necessary to avoid the Tu patent. Defendants rely instead on the sheer number of amendments to the claim language. The number of amendments alone does not illuminate why the amendments were necessary to avoid Tu, if they were. Defendants do not persuade that amendment-based estoppel applies here because, though amendment occurred, they fail to demonstrate either that the amendments narrowed the claim or that they added a new limitation or claim term.

Having concluded that neither of Defendants' proffered grounds for estopping AngioScore from invoking the doctrine of equivalents applies, the Court **DENIES** Defendants' motion for summary judgment of non-infringement of the '119 Patent's limitation that "each strut extends from the proximal end to the distal end" of the strut.

2. "Longitudinal Expansion of the Strut"

Defendants move for summary judgment of non-infringement with respect to the '119 Patent's limitation, in claim 1, that each strut, "prior to radial expansion" of the stent, "has one or more bends that allow longitudinal expansion of the strut to accommodate radial expansion of the stent upon inflation of the balloon." The Court has construed "longitudinal expansion" to mean "reshaping by straightening" and, in so doing, rejected both Defendants' and AngioScore's proposed

1 constructions. For the reasons set forth below, Defendants fail to establish that the evidence now
2 before the Court entitles them to a declaratory judgment of non-infringement.

3 *a. Literal Infringement*

4 Defendants argue that the struts of Chocolate do not literally infringe because measurements
5 taken by Defendants' employees at the direction of defendant Konstantino purportedly demonstrate
6 that when Chocolate inflates, its struts, rather than expanding longitudinally, shrink. (Motion at 15;
7 Konstantino Decl. ¶¶ 10-15.) AngioScore presents its own set of measurements, taken by its expert,
8 which purport to show that the struts of Chocolate stretch, albeit by miniscule amounts. (Opp'n at
9 18; Dkt. No. 143 ("Levenston Decl.") ¶¶ 15-16 (claiming that precise measurements reveal that the
10 struts of Chocolate increase in length by approximately 0.2 percent during inflation, much of which
11 is due to a 1.1 percent increase in the length of the 10 millimeters closest to the end of the strut).)

12 Given the construction of "longitudinal expansion" to mean "reshaping by straightening," the
13 parties' dueling measurements ultimately bear a tangential relationship at most to the question of
14 whether Chocolate infringes that limitation. As explained in Section II.B.2, the '119 Patent does not
15 claim that the metal of the struts grows, elongates, or stretches. Rather, the '119 Patent claims struts
16 that reshape by straightening when exposed to the force generated by the inflating balloon beneath
17 the stent. The parties' measurements present a genuine dispute of fact, but the fact they dispute is
18 not, ultimately, a material fact that could support or ward off summary judgment. *See Liberty Lobby*,
19 477 U.S. at 247-48 ("[T]he mere existence of *some* alleged factual dispute between the parties will
20 not defeat an otherwise properly supported motion for summary judgment; the requirement is that
21 there be no *genuine* issue of *material* fact.") (emphases in original).

22 The pertinent question is whether the evidence before the Court, viewed in the light most
23 favorable to AngioScore, establishes Defendants' entitlement to a declaratory judgment of non-
24 infringement. With respect to literal infringement of the "longitudinal expansion" element of the
25 '119 Patent, the Court cannot say it does. The evidence does not establish that the struts of the
26 Chocolate device, "prior to radial expansion," contain no "bends that allow" reshaping by
27 straightening "to accommodate radial expansion of the" constraining structure of Chocolate "upon
28 inflation of the balloon." (119 Patent, col. 4:17-22.) Accordingly, Defendants' Motion is **DENIED** to

1 the extent it seeks a declaratory judgment that Chocolate does not literally infringe the "longitudinal
2 expansion" limitation of claim 1 of the '119 Patent.

3 *b. Availability of Doctrine of Equivalents and Patent Local Rules*

4 Defendants again contend that AngioScore may not offer equivalence arguments to prove
5 infringement of the "longitudinal expansion" limitation because "AngioScore did not even allege
6 infringement under the doctrine of equivalents for this limitation in its infringement contentions."
7 (Motion at 16; *see also* Reply at 10 (same).) In this instance, the Court agrees with Defendants. As
8 discussed in Section II.A.2.a, this Court's Patent Local Rules require early disclosure of an
9 infringement plaintiff's theories of infringement, sufficient to give defendants fair notice of the
10 reasons why the plaintiff believes the accused instrumentality infringes. *E.g., CSR Tech.*, 2013 WL
11 503077, at *8.

12 Here, AngioScore listed the '119 Patent's "longitudinal expansion" claim among its
13 infringement contentions. (Stowell Decl., Ex. G, at p. 7 of internal exhibit A.) The contention gives
14 notice of AngioScore's theory of how the structures of Chocolate literally infringe the pertinent
15 limitations of the '119 Patent. (*Id.*) But nowhere in this contention does AngioScore invoke the
16 doctrine of equivalents, much less give Defendants notice of the reasons why it thinks Chocolate
17 infringes the "longitudinal expansion" limitation. (*See id.*) "The patent local rules were adopted by
18 this district in order to give infringement contentions and claim charts more 'bite.'" *OptimumPath,*
19 *LLC v. Belkin Int'l, Inc.*, C 09-01398 CW, 2011 WL 1399257 (N.D. Cal. Apr. 12, 2011) *aff'd*, 466 F.
20 App'x 904 (Fed. Cir. 2012) (quoting *MEMC Elec. Materials v. Mitsubishi Materials Silicon Corp.*, C
21 01-4925 SBA, 2004 WL 5363616 (N.D. Cal. Mar. 2, 2004)). Accordingly, the Court concludes that
22 AngioScore, because its disclosure does not give adequate notice of its equivalence theory, is barred
23 from asserting the doctrine of equivalents to prove that Chocolate infringes the '119 Patent's claim of
24 a stent that "prior to radial expansion has one or more bends that allow longitudinal expansion of the
25 strut to accommodate radial expansion of the stent upon inflation of the balloon." AngioScore may
26 advance only its disclosed contention of literal infringement.

27 Defendants Motion is **GRANTED** to the limited extent that it seeks a ruling that AngioScore is
28 barred from relying on the doctrine of equivalents to establish infringement of the "longitudinal

expansion" limitation in claim 1 of the '119 Patent. The Court need not and does not reach the parties' arguments regarding prosecution history estoppel and vitiation.

3. "Attached"

With respect to the final limitation at issue, AngioScore alleges that Chocolate infringes both literally and by equivalence the '119 Patent's limitation, in claim 1, that "the distal end of the hypo tube is attached to the distal end of the catheter shaft and the proximal end of the tube is attached to the proximal end of the catheter shaft." Having rejected both parties' proposed constructions of "attached" and held that that term has no special meaning in the '119 Patent, the Court determines that Defendants have failed to establish their entitlement to a summary judgment of non-infringement with respect to the "attached" limitation. A genuine issue of material fact exists.

a. *Literal Infringement*

The parties agree that the wire structure of the Chocolate device attaches to the device's catheter shaft only indirectly, in that the legs of the balloon, being fused directly to the catheter shaft, intervene between the wire structure and the catheter shaft. (Motion at 20 (citing Konstantino Decl. ¶¶ 16-18, Ex. C); Opp'n at 22 ("It is undisputed that the ends of the constraining structure are attached to the 'legs' of the balloon, which are 'fused' by heat to the catheter shaft.")) Defendants assert that this fact entitles them to summary judgment that Chocolate does not literally infringe the '119 Patent's requirement of attachment between the hypo tube and the corresponding end of the catheter shaft. As set forth in the Court's claim construction discussion, however, Defendants' position relies on a limitation not present in the patent, namely, a limitation of direct, surface-to-surface attachment with no intervening layers or connections. The term "attached" is broader than that and nothing in the '119 Patent narrows it.

On the contrary, AngioScore presents evidence that once the balloon legs and the catheter shaft of the Chocolate device are fused together, they become functionally indistinguishable. Viewing that evidence in the light most favorable to AngioScore, and given the ordinary and customary meaning of the term attached, which encompasses connection or junction by some amount of intermediate means, the Court concludes that a genuine dispute exists as to whether the Chocolate device literally infringes the '119 Patent's attachment limitation.

b. *Doctrine of Equivalents and Patent Local Rules*

Defendants argue that AngioScore may not invoke the doctrine of equivalents because it failed to provide "particularized testimony and linking argument" in its infringement contentions. While Defendants' argument misstates the relevant standard, *see supra* Section III.B.1.b.i, the Court concludes that AngioScore's Disclosure statement did not give Defendants fair notice of its equivalence theory. The portion of the Disclosure dealing with the "attached" limitation recites:

The hypo tube of the Chocolate Balloon Catheter is attached to the catheter shaft at its proximal and distal ends as disclosed in the '119 patent specification. [Citation.] [¶] Each limitation is literally present in the Chocolate Balloon Catheter. However, to the extent Defendants allege that certain claim elements are not present, AngioScore contends that any "missing" claim element is also met by the Chocolate Balloon Catheter under the doctrine of equivalents. *In particular, Defendants' argument that both ends of each strut are not attached to the catheter shaft is an insubstantial difference, as discussed above.*¹⁶

(Stowell Decl., Ex. G, at p. 9 of internal exhibit A (emphasis and footnote supplied).)

Here, unlike in the case of the "end" limitation (*see supra* Section III.B.1.b.i), AngioScore's disclosure is merely a conclusory recitation of the standard for equivalence, providing no reasons why AngioScore believed Chocolate's manner of attachment equivalent to that of the '119 Patent. "Although more words are added to the boilerplate," no more information is added. *CSR Tech.*, 2013 WL 503077, at *9. AngioScore was required, however, to "specify in what way Defendant[s] products infringe under the doctrine of equivalents, 'or drop the contention altogether.'" *Id.* (quoting *Creagri, Inc. v. PinnacLife Inc., LLC*, 11-CV-06635-LHK-PSG, 2012 WL 5389775, at *6 (N.D. Cal. Nov. 2, 2012)). When AngioScore disclosed its contention that Chocolate infringed the "end" limitation under the doctrine of equivalents, it availed itself of an important word: "because." Not so here. To be clear, the Patent Local Rules require no particular words, nor any quantity. Rather, they require context-sensitive, element-by-element *notice* of the reasons why equivalence is alleged. *Cf. Shared Memory Graphics*, 812 F. Supp. 2d at 1025-26 (identifying disclosures that satisfied

¹⁶ While the Disclosure avers that an insubstantial difference is "discussed above," AngioScore has not cited, nor has the Court been able to find, the referenced discussion. *Keenan v. Allan*, 91 F.3d 1275, 1279 (9th Cir. 1996) (courts are entitled to "rely on the nonmoving party to identify with reasonable particularity the evidence that precludes summary judgment") (quoting *Richards v. Combined Ins. Co. of Am.*, 55 F.3d 247, 251 (7th Cir. 1995)).

specificity requirement and therefore facilitated resolution of the case, as well as disclosures that did neither). With respect to "attached," AngioScore disclosed no such information, only a conclusory allegation of "insubstantial difference" decoupled from any explanation why the difference is insubstantial. Because AngioScore did not disclose the basis of its equivalence contention in terms specific enough to put Defendants on notice thereof, the Court **GRANTS** Defendants' motion for summary judgment of non-infringement to the limited extent that it sought a ruling that AngioScore is barred from relying on the doctrine of equivalents to establish infringement of the contested "attached" limitation of the '119 Patent.

CONCLUSION

As set forth above, the Court **GRANTS IN PART AND DENIES IN PART** Defendants' Motion for Summary Judgment of non-infringement (Dkt. No. 131). The accused instrumentality does not literally infringe the '119 Patent's limitation of struts that extend from each "end" of the stent, and AngioScore may not rely on the doctrine of equivalents to prove infringement of the contested limitations "longitudinal expansion" or "attached." Defendants' Motion is otherwise denied.

Defendants' administrative motion to seal exhibits B and C to the Konstantino Declaration (Dkt. No. 133) is **GRANTED**.

The administrative motion to seal that plaintiff filed in connection with its opposition brief (Dkt. No. 138) is **DENIED WITHOUT PREJUDICE** to filing of amended submissions, consistent with the Court's concurrently issued Order Denying without Prejudice Motions to Seal.

Plaintiff's motion to strike the declaration of Dr. Amir Belson (Dkt. No. 139) is **DENIED**.

This Order terminates Docket Nos. 131, 133, 138, and 139.

IT IS SO ORDERED.

Dated: June 25, 2014



YVONNE GONZALEZ ROGERS
UNITED STATES DISTRICT COURT JUDGE